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Eminent Authorities Endorse Our Seed.

W. A. HENRY

Dean Wisconsin College of Agricul-

E. DAVENPORT

Dean of the Illinois College of Agriculture.

C. F. CURTISS

Director of Agriculture Iowa State College.

A. D. SHAMEL

Agricultural Department U. S. Government, Washington, D. C.

F. W. TAYLOR

Chief of Agricultural Department, St. Louis World's Fair.

CYRIL G. HOPKINS

Head of Department of Agronomy and Chemistry, University of Illinois.

W. C. GARRARD

Secretary Illinois State Board of Agriculture.

Your company is entitled to great credit for inaugurating a most important movement. I trust that progressive farmers, desirous of improving the quality and quantity of corn they grow, will make a liberal use of the choice seed which you are able to produce. I have visited some of the choice seed farms of the Old World and assure you that I hail with delight the inception of this enterprise by your company, which from the beginning takes rank with the best.

I want to express the interest I feel in your great enterprise of breeding seed corn. Your plan of selling upon the ear is not only the best guarantee to the public of the quality of the corn, but it is also the best index of the progress you are making in breeding. The only fault I could find with your plan is that your price for such corn is not sufficient to cover the cost of its production and leave a fair margin of profit. This is the beginning of what may some day make your name and estate as famous in the world as have become those of the Vilmorins of France.

I feel certain that our corn crop is destined to undergo radical changes in the near future and that such changes must come largely from the kind of efforts you have inaugurated in a systematic way on a large scale, where you have opportunity to select the best types, keep them pure and establish them in their characteristics in such a way that they can be relied upon to produce crops of heavier yield and superior quality, thereby enhancing both the commercial and feeding value of this great crop which means so much to the success of American Agriculture.

I believe that the establishment of the Funk Bros. Seed Company marks the beginning of a new epoch in the production of crops in the United States. I know that the work has been done in the most thorough and scientific manner possible and under exceptionally favorable conditions for the improvement of the varieties of corn.

It seems almost unbelievable that for so many years, the hit or miss method of selecting the seed from which to grow corn to the value of many millions of dollars annually, should have prevailed. The systematic and thoroughly scientific way in which you are proceeding in the method of selection and growth, will add millions of dollars to the receipts from the sale of each crop. What you are doing for agriculture will become classic.

The work which is being done in corn breeding by the Funk Bros.' Seed Company furnishes one of the greatest, if not the greatest, illustration of the practical application of science to American Agriculture. They have adopted the scientific principles and accurate methods which have been discovered and most carefully tested by the Illinois Seed Corn Breeders' Association. They have applied these methods with a high degree to exactness and on a scale of great magnitude, and they are following this work up with such care and accuracy in all its details that their efforts are already showing some marked effects, the ultimate results of which will certainly be a very great improvement of the best varieties of corn which now exist, and not only in yield per acre, but in uniformity, quality, and composition.

Let me add my endorsement of your effort to improve seed corn to that of the hundreds of others who have already expressed their approval of your work. I have no doubt the farmer who profits by your venture in corn breeding will appreciate the value of such an enterprise.

HOW TO ORDER.

Please be careful to sign plainly your name, postoffice, county and state, **on each order** that you send Cash must accompany the order. Money can be sent safely either by postoffice order, bank draft, express order, or the cash by registered letter. Postage stamps are accepted the same as cash for amounts under \$1.00 No goods sent C. O. D.

Please write each item of your order on a separate line and carry out the correct prices. Keep a copy of your order, with which to check off the goods when received, to be sure that you receive just what you order.

We seldom make mistakes, but when we do, we want to be notified immediately so they can be corrected.

Correspondence—We have endeavored to make everything as plain as possible in this catalogue, but in case further information is desired, make your wants known in as few words as possible and on a sheet of paper separate from your order, giving your complete address and enclosing stamp for reply.

Please order early,

Be sure to use our order blank and carefully fill out all required blanks. We take much pride in promptness and accuracy in filling orders.

Sample Ear, Any Variety, Postpaid, 40 cts.

FUNK BROS. SEED COMPANY

Officers and Directors

E. D. FUNK
PRESIDENT
L. H. KERRICK
VICE-PRESIDENT
F. H. FUNK

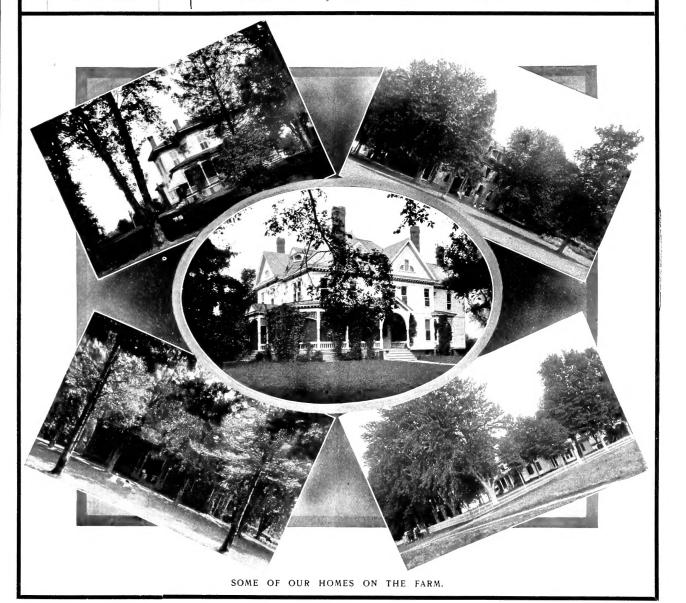
TREASURER
D. N. FUNK
SECRETARY

J. D. FUNK

BLOOMINGTON, ILLINOIS

---- (INCORPORATED 1901

OFFICE, 403 NORTH EAST STREET, BLOOMINGTON, ILLINOIS
WAREHOUSE, FUNK'S GROVE, ILLINOIS-ON CHICAGO & ALTON R.R.







Why Funk Bros. Are Breeding Seed Corn





N 1824, when the rich acres of central Illinois were growing nothing but prairie grasses, with here and there a small acreage of timber, Isaac Funk, Sr., settled in McLean county. He recognized the great value of the deep black soil for producing grasses and grains necessary for the raising and fattening of cattle.

Locating on the south edge of the 3000 acres of timber, later known as Funk's grove, he entered considerable government land and soon became widely known as a successful cattle breeder and feeder. At his death Isaac Funk left an estate of 25,000 acres in one body. His eight sons all followed in the footsteps of their father, breeding and feeding cattle, hogs and sheep as a vocation, some taking up banking and politics as an avocation.

Hon. L. H. Kerrick, who married the only daughter of the family, is also widely known as a prominent breeder and feeder of Angus cattle.

And now comes the third generation of thirteen brothers and cousins. They have continued the breeding and feeding of live stock with as much success as their fathers and grandfather, but have gone more extensively into the raising of grains in connection with stock. Being familiar with the advantages of pure bred live stock, it occurred to them that no attempt had been made toward improving the varieties of corn, oats, or other farm crops. By careful study of all data on the subject and close observation of their own fields they soon discovered that the improvement of grains was just as important and as practicable as the improvement of live stock.

With this discovery came the determination to begin the scientific breeding up of farm crops on a large scale. "And why not? Who are better equipped for this great work? The members of the second generation are noted not only as successful farmers, but as ranch owners, bankers and merchants. The third generation is composed of strong, well educated young men, most of them with considerable experience in business. Graduates of the leading colleges, they now have the added equipment of a thoroughly practical knowledge of agricultural and business operations. They are thoroughly imbued with the import-

ance of breeding field crops true to a type of increased productiveness." - Orange Judd Farmer.

25,000 Acres of Rich Land in One Body,

Owned by young men who work in harmony; these conditions furnish unequalled facilities for isolating breeding plots and for growing pure seed in large quantities and increasing its yielding capacity.

And so this great work has been started. The Funk brothers began by deciding that increased yield and quality must be secured and a system of breeding was worked out on scientific lines. Examination of a cornfield ready to be husked, showed a surprisingly large number of barren stalks, a great many more stalks with only nubbins, and nearly all the remainder of medium size, with very few large, well formed ears. What was the matter? Simply this, that the corn was in a state of low prepotency, that is, its power to reproduce its desirable characteristics, such as size and weight, etc., was small. When the kernels from a large ear were planted they would produce 10 to 15 per cent of barren stalks, 40 to 50 per cent of

nubbins, 30 to 35 per cent of medium sized ears and only 5 or 6 per cent of ears resembling the one planted.

Being live stock breeders, familiar with what had been done to improve farm animals, Funk Bros. decided to adopt methods much like those used for building up their herds. Of course, these methods were modified to fit plant conditions. The first essential step in the breeding of corn was to select small blocks of ground of 5 to 10 acres in extent, which were **isolated** from all corn fields. In these **breeding blocks** the corn is **raised and bred** by a system that is the most reasonable and successful method possible for the breeding up of yield in grains, a full description of which is given on pages 6 and 7.

These breeding plots are on rich soil and are given good cultivation.

The idea is to breed up the average size of the ear, eliminate barren and inferior stalks, which produce only nubbins, and increase the amount of oil and protein in corn for feeding purposes.

A special breeding plot is provided for each special purpose. For instance in one plot a high percentage of oil is striven for. In another a high percentage of protein. In all the attempt has been not to increase the yield by breeding for a few ears of large size, but to have 'all the ears of good size and uniformity, small cob and a high percentage of grain.

When the corn from the breeding plot is harvested, only the seed from the ears producing a very high yield is preserved. The smaller ears are used for feeding purposes. It is only from the very best of the good ears that the seed for the breeding plots of the next year is selected. The remaining good ears are used for planting in the general fields. The acreage aggregating annually about 8,000. The Funk Bros. have met with greater success in breeding up the yield and feeding value of corn than they anticipated.

Although they have spent considerable money in this work, they have been more than repaid, simply in the increased output of their own fields.

A private chemical laboratory has been established by this company for analyzing corn, to ascertain which ears contain the highest percentage of protein and oil. **Protein** in corn is valuable because it is this material which goes to build up the bone, muscle and tissue in the body of the growing animal. Oil is especially valuable for fattening and finishing live stock for market. It is also the most valuable byproduct of the glucose factory and the glucose people will pay a premium on corn containing a high percentage of oil. The ideal feeding corn is that which contains a high percentage of both oil and protein.

Specialties We Are Breeding.

High oil and high protein for general feeding.

High oil with low protein for glucose factories.

High protein, without changing the normal amount of oil to obtain a balanced ration for fancy beef and for bacon hogs.

High protein with low oil for growing cattle and for young stock.

Although we have not as yet obtained the high percentage of oil and protein for which we are striving, we know that with the increase we wish to secure in protein we can develop young stock more rapidly and with less grain than formerly with the ordinary corn. Also the increase in oil secured thus far fattens and finishes our stock for market much more rapidly than with common corn. We are striving to secure a corn two bushels of which will do as much toward developing farm animals as three of ordinary corn. This will increase the feeder's capacity 50 per cent. It is a much easier matter to breed up corn in quantity and quality than any other grain. For this reason, other grains have been changed but little. Oats, wheat, rye and barley are much the same as they were 800 to 1000 years ago. Corn, however, is a very different product compared to the corn of 300 years ago, when it was first discovered. At that time it was very small, with ears containing 100 to 200 kernels.



HOW WE BREED SEED CORN





DVANCEMENT, progress, development, in live stock or horticulture have been obtained only by some systematic plan of breeding, breeding more or less difficult depending upon the end desired and upon the thing under development. Every system of breeding, from the most simple to the most intense, has as its foundation the old and established fact, that "like

produces like." In corn breeding, this fundamental motto governs all selections. Our selections are such that they result only in the "survival of the fittest."

To give a clear understanding of how we breed corn, it will be necessary to go back to the very beginning of our endeavor. By personal selection from

the seed of twenty or thirty of the best corn raisers in the United States we procured some 2,000 bushels of the finest corn in the world. From this amount about 3,000 of the finest ears were selected. The points that influenced this selection were weight, solidity, uniformity, size; the shape of the ear that allowed of the most possible grain to the cob surface and per cent of shelled grain. The record taken of these ears and entered in our pedigree book, was as follows: First, the ear was given a number, then we recorded its length, circumference at the butt and tip, amount of space between the tops of the kernels, number of rows, the number of kernels in a row, char-



Four Pedigree Ears.

acter of the butt, character of the tip, weight of ear, weight of cob, character of kernel crown, length of kernel, depth of kernel, breadth of kernel, shape and shade of kernel, circumference of cob at tip and butt, shade of the cob; also the per cent of protein, per cent of oil, per cent of starch contained and where planted, that is to say, in what breeding block and in what row. Then each of these ears was planted in a single row of a certain breeding block.

These breeding blocks are small plots of ground of from five to ten acres in extent, scattered over our farms. Their location was not defined by convenience or richness of the soil, but they were placed exactly where they received the most complete isolation. Some are located in the very heart of the timber, some along the edge, and others in the center of great pasture lands, and all of these out of the way places were selected simply to keep other corn from blowing over and mixing with this especially bred corn.

We have **thirty breeding blocks** containing on an average of 100 rows, fifty rods long. Each one of these rows is planted from a single ear. The rows are all numbered as well as the ears, and the row

Numbered Rows Planted From Single Ears.

number is set down in the record of each ear. We prepare the seed beds for the breeding blocks with great care and plant exactly three kernels to the hill. When the corn is about ten inches high, each hill is thinned to two stalks.

As is well known, the male portion of the corn is the tassel, the ear being the female part. From every kernel on an ear, there runs a silk out past the ends of the husks. The pollen from the tassels falls upon these silks which are hollow like hairs, dissolves and permeates the silks. Then it follows this hollow channel to the end of the silk where the kernel is to be formed. There fertilization takes place and the ker-

nel is produced. This process must be gone through with for every kernel or else there will be no formation of a grain. The season for the pollen to fly, and for the silks to receive it, is during the month of July

and the first part of August. Before this period comes on, every barren and inferior stalk in all our breeding blocks is removed or detassled, so only the fruitful and hearty stalks remain.

This elimination insures that every kernel in the breeding blocks has been pollenated by a fruitful and vigorous stock.

Every few days our breeding blocks are inspected by an expert who takes field notes upon the condition and progress of each row. These notes show among other things, the state of maturity, and determine our selections for the earlier type of each variety.

Harvesting these rows is very tedious. Each row is gathered by itself, everything from the largest ear to the smallest nubbin is shucked and brought to the seed house. There the entire yield is taken in pounds. The ears are then counted and separated into good, medium and poor, and each of these kinds are

counted and again weighed. Just before harvesting the breeding block, the actual number of stalks and hills were counted in each row. Now having the total yield (and the exact number of stalks, we can readily find the average amount of corn produced by each stalk. Again, by having the total yield and exact number of hills, we find the average of each hill in corn production, we plant 3,556 hills to an acre. From this we compute the yield such an ear would make per acre. Some ears having great prepotency, (that is, the power to reproduce ears resembling in size and shape the parent), make extraordinary large yields, while others with low prepotency make only ordinary yields. The yield per acre, taken together with the average size of the ears, forms our basis for selection for the coming year. The ears for the same breeding block for the next year are selected only from the ten rows giving the highest yield and prepotency. These ears are the cream of the ten champion rows.



Detasseling weak and barren stalks.

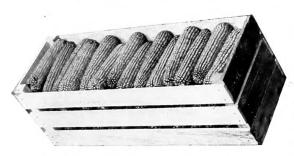
Seed for our general fields is selected only from rows giving the highest yield per acre. And then it is only the cream of the general fields which is selected for seed corn, to go on the market. We have annually about 8,000 acres in a

selected for seed corn, to go on the market. We have annually about 8,000 acres in corn. Our breeding blocks comprise 210 acres. So you see every acre of our breeding blocks must supply enough seed corn for about 40 acres of the general fields. From our general fields, about five per cent are selected for our **high bred seed corn**, which we send **in the ear** in bushel crates. There are many small details and technicalities performed which must be left out of our description but which are essentials in the successful breeding of corn.

NOW LET US LOOK AT THE CHEMICAL IMPROVEMENT.

You have seen how we breed up the physical side of corn. Chemical improvement is only going a step further for the benefit of the feeder. To carry on this feature of corn breeding, expert chemical knowledge is required. Rather than be dependent upon whomsoever we might be able to get to do this for us each year, we fitted up a complete laboratory of our own, sparing no expense to make it the most complete corn analysis laboratory in the world. But perhaps the fact that enables us to carry on this work successfully, is that the services of **Dr. R. O. Graham** were secured as our chief chemist.

An ear, to be planted in our chemical breeding blocks, must not only be a champion ear in the yield test but it must also test higher in protein or oil than the seed from which it was grown. Although the

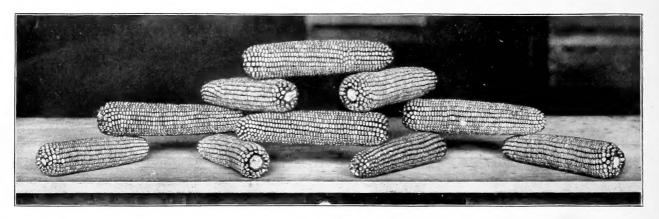


This is a bushel crate of our High Bred Seed Corn.

chemical breeding of corn is a later feature with us, it is extremely important. Protein is the introgenous substance contained in corn. It is the fundamental article required by growing stock for the development of the muscles, bone, tissue and hide of their bodies. Protein is essential in the production of marble beef and bacon hogs. The fatty part of cornoil, is more generally understood by feeders in general. They know that ordinary corn contains a large amount of fat and that nothing will fatten and finish steers and hogs so well as corn oil—that is, nothing unless it is more corn-oil. And this is the reason we are breeding up oil in corn. We know that three

bushels of corn will put on about so many pounds of fat. And we also know that with a higher per cent of oil, two bushels of corn will put on the same amount.

THIS IS HOW WE RAISE MORE STEERS TO THE ACRE.

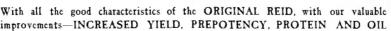


His Excellency.



HIS EXCELLENCY

Bred From Reid's Yellow Dent





Description of His Excellency.



HIS corn is light golden in color, very characteristic of this variety. The ears are 9 to 11 inches long, 7 to 8 inches in circumference, 18 to 24 rows of kernels, each row containing 50 to 60 kernels. The ears weigh 11 to 16 ounces, and are cylindrical from butt to tip. The cob is completely covered with solid corn, shelling 88 per cent grain and often better. The ears of this variety are **remarkably uniform**. In this respect it is markedly superior to all other corn. The kernels are moderately rough, ½ inch long, rather narrow, medium in thickness, wedge shape, setting very closely together with no lost space between the rows. A wagon load of this corn will weigh more than a load of any other variety. The cob is red in color, medium to small with small shank, making it very easy to shuck. The corn is a vigorous grower, with stalks 8 to 12 feet high, heavy below the ear, moderate above and does

not blow down easily. It has an abundance of foliage, each stalk bearing 16 to 18 dark green, glossy leaves. This makes it an excellent fodder and ensilage plant, producing a heavy tonnage to the acre. When cut and shocked it cures completely, retaining its natural green color, becoming the very best of fodder.

We have bred this corn up in oil and protein until it approaches a balanced ration. By careful selection, elimination of barren and weak stalks, the corn has been so improved that a yield of 90 to 100 bushels an acre should be secured on fair to good soil carefully managed.

His Excellency Is Incomparable.

Its solidity, uniformity, development of tip and butt and extraordinary yield, place it in the king row of the farmer's esteem. Its prepotency or power of reproduction is so great that neither wet nor dry weather noticeably influences its growth and maturity. Inapproachable as a yielder, it withstands the

harshest weather, and when shelled more of this corn grades No. 2 on the Chicago market than any other variety. This alone sometimes means from 2 to 20 cents per bushel premium over ordinary corn.

This corn grows best on the rich corn soils of the corn belt states. It is here that it attains its greatest perfection, producing the largest yield, of the highest quality. It matures in 112 to 115 days and can safely be planted as far north as southern Wisconsin and as far south as southern Missouri. It is a medium maturing variety. The small cob dries out readily and it can be husked and cribbed early.

His Excellency's Performance Record.

Our seven breeding plots of His Excellency show some remarkable results.



In breeding block No.7 seed from ear No.55, planted in plot No.5 produced at the rate of 126 bushels an acre. In this plot there were 240 hills each containing an average of 2 stalks. Each hill produced 40 oz. per hill. From this we can compute the yield per acre.

Ears No. 22 and No. 5 produced at the rate of more than 120 bushels an acre. Besides these there were a large number which produced 100 bushels or better. However, only the best ears produced by ears No. 55, No. 22, No. 5 will be selected for breeding block No. 7 next year. The remaining good ears produced by ears yielding over 100 bushels an acre will be planted in the general field and the cream resulting from these will be placed on the market.

This is the basis of our claim for HIGH BRED SEED CORN. Is it not a valid one?

WILL IT NOT PAY YOU TO PLANT OUR HIGH BRED SEED CORN?

We secure these high yields, YOU CAN.

Prices



A true type of His Excellency.

SEND FOR THE SEED
AND SEE.
SEE IT IN THE EAR.
SEE IT CROW.
SEE IT PRODUCE.
SEE THE DOLLARS.

OUR SOIL IS NO BETTER THAN YOURS. OUR CULTIVATION IS NO BETTER THAN YOURS. WE USE NO FERTILIZER.

The stalk of His Excellency.

•	IN THE EAR (sent in bushel crates)	\$2.50
•	This variety shelled, per bushel (bags free)	\$1.50

F. O. B. No order accepted for less than one bushel.

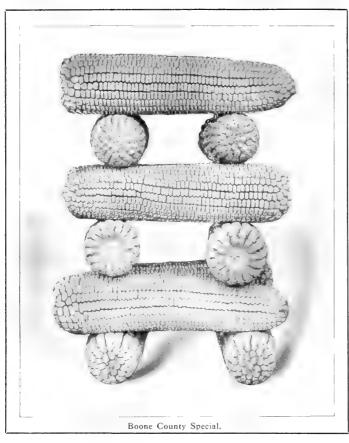


BOONE COUNTY SPECIAL

Bred From Boone County White









HIGHLY-BRED white corn of extra large size. containing a high percentage of oil. It is a rather late maturing variety, requiring 120 days for full development, the ears are from 9 to 12 inches long, $7\frac{1}{2}$ to $8\frac{1}{2}$ in circumference, containing 18 to 24

rows with 52 to 58 kernels in each row and weighing from 12 to 18 ounces. The cob is medium to large and pure white in color. The ear shank is medium. The ears resemble a cylinder, rounding off within an inch of the tip. Why is a cylindrical ear superior to a tapering ear? A tapering ear means the dropping of several rows where the taper begins. This is a loss of just that much grain. The butts and tips are exceptionally well filled. The ears are of uniform appearance, shape and size. The kernels are creamy white, moderately rough, very deep, with fine large germ. They are one-half to three-fourths inch long, one-third inch wide, moderately thick, with little, if any, waste space between the rows. The great depth of kernel always insures a large percentage of shelled corn. Boone

THE CORN FOR ALL KINDS OF County Special is a high grade milling and glucose corn. SOILS AND SEASONS IN CENTRAL AND SOUTHERN ILLINOIS AND LIKE LATITUDES EAST AND WEST.

Nine-tenths of the oil in corn is contained in the germ. The germ of Boone County Special is exceptionally large, making it possible to carry a high percentage of oil (5 per cent or better). This oil gives the corn its high fattening qualities and makes it exceptionally valuable for the glucose people.

The stalk is 9 to 13 feet high, exceedingly thick up to the ear, moderately large from ear to tassel. This conformation of stalk is very effective in withstanding the destructive effect of high winds. The foliage is abundant, leaves broad, thick and succulent, curing into large quantities of peerless folder.

BY LONG AND CAREFUL BREEDING the number of unproductive and weak stalks has been reduced to the minimum and the average size of the ears increased to the maximum. As a result of this painstaking, scientific work Boone County Special is the Greatest Yielding Corn Known.

Best Corn for Old Fields.

Plant white corn on old fields. It gathers more of its plant food from the air and less from the soil than does yellow corn. For this reason **Boone County Special** is particularly valuable for the older corn states like Missouri, Illinois, and Indiana, where it has been found productive and prolifie.

Our Motto in Breeding this Corn is "For Every Stalk To Do Its Part."

This has been accomplished by careful work during the growing season, eliminating barren and defective stalks, cutting out all except those which produce

standard ears. Persistence along this line has resulted in a wonderful prepotency in this respect.



From Breeding Block No. 12.

Ear No. 69, planted in row No. 86, containing 260 hills, produced $42\frac{1}{2}$ ounces to the hill which is at the rate of 134 bushels per acre. This row averaged $2\frac{1}{2}$ stalks to the hill.

What we have been breeding for is not extreme size in single ears, but good size and uniformity in all ears.

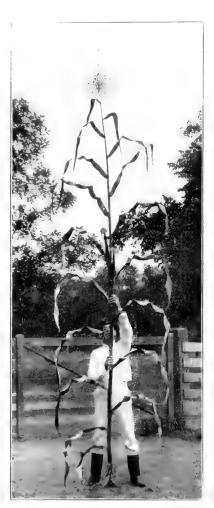
We do not claim extraordinary size of a few ears but do insist that Boone County Special produces a larger percentage of big ears than any other variety of corn. It is this quality that makes it par excellence as a yielder. Planted on any good corn soil, given careful attention, Boone County Special will always do its part in making the farm pay.



Boone County Special Seed Ear.

There are two ways for a farmer to increase his corn crop. One is to increase his acreage, the other is to increase his yield. One means additional expenditure of money and labor, the other means a little more wisdom. If you have 50 acres in corn and raise 100 bushels an acre are you not better off than your neighbor who has 100 acres and raises 50 bushels an acre. Be sure you are raising all the corn possible on the present acreage before taking on more corn land.

There are four essentials in raising a maximum corn crop: First—The preparation of the seedbed, Second—The cultivation, Third—The season, Fourth—The quality of the seed. It is the business of the corn grower and stock raiser to study the preparation and cultivation until he performs them perfectly. The Almighty will handle the season and it is our business to furnish PURE BRED SEED and OUR part will be performed successfully.



Stalk of Boone County Special.

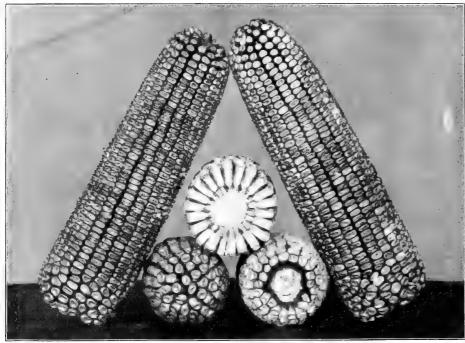
F. O. B.

No order accepted for less than one bushel.



GOLD STANDARD LEAMING





Gold Standard Leaming-The Feeder's Corn.

Bred from the Original J. S. Leaming CORN

We have increased the size of ears and percentage of grain by breeding from tapering to cylindrical shape. We have also increased depth and roughness of kernel and feeding value by increase of protein and fat.

THIS IS THE OLDEST DISTINCT VARIETY OF CORN

HAVING BEEN ORIGINATED IN 1826.

Since then it has been carefully bred to a rich, deep golden color, to a greater uniformity, to large, slightly tapering to cylindrical ears, well filled at the butt and tip. The ears range from 9 to 11 inches long and from $7\frac{1}{2}$ to 8 inches in circumference, weighing from 12 to 17 ounces a piece. Each ear has from 16 to 24 rows of kernels with the minimum space between the rows, each row contains from 50 to 58 broad, thick, deep kernels, rough, rounding-wedge shaped, $\frac{1}{2}$ to $\frac{5}{8}$ inches long and $\frac{3}{8}$ inches wide. The kernels are set on a red cob of medium size, with medium large ear shank. The percentage of grain is high—86 to 90 per cent. The stalks range from 9 to 12 feet in height, are well developed below the ear and slender above. They are very valuable for forage and are especially prized for ensilage. The great abundance and large size of leaves, the fine quality of leaves and stalk, the large proportion of sugar in every part of the plant, result in sweet, palatable ensilage and corn fodder if the crop is to be preserved in the silo or in the field.

Gold Standard Learning is the Ideal Feeder's Corn.

It contains more protein and oil than any other variety grown. Not only is the chemical composition ideal from a feeder's standpoint, but it is **especially palatable and digestible** for growing and fattening animals. All kinds of stock like it. Its digestibility is very high, the minimum amount passing through fattening steers undigested. It is more completely assimilated in the animal's stomach than any other corn. Its chemical composition is such that an animal can consume and assimilate larger quantities than of any other variety. Four bushels of GOLD STANDARD LEAMING will put as much fat on a hog or steer as five of ordinary corn.

We have not only bred this corn to increase the feeding value, but also to secure an extraordinary yield. Taking the acre as a unit it would profit the feeder but little to increase the percentage of protein

and oil without regard to yield. A large total of protein and oil per acre is what we are striving for. This necessitates high yielding qualities in addition to improvement in chemical composition. For example: Fifty bushels per acre testing 20 per cent protein would not be as valuable to the feeder as 100 bushels testing only 11 per cent. The 50 bushels would contain 560 pounds of protein an acre and the 100 bushels 616

pounds an acre. Our Gold Standard Learning contains 2 per cent

more protein than ordinary corn.

Feeders, it Will Pay You to Get Our Seed.

We are farmers and feeders ourselves. We always have been, we always will be. We started to breed corn to benefit our yields. We did it. We can now feed less corn than formerly and procure the same results. Where we had to feed thousands of dollars worth of wheat stuffs along with our corn we now feed our high protein corn only, and market the same or a better quality of beef and pork. We now sell bacon hogs, we now sell marble beef. You can sell the same kind of pork and beef by growing and feeding Gold Standard Leaming.

This corn matures in about 115 days. It can be grown in any latitude south of southern Wisconsin. It is well adapted to all corn soilselays, elay loams, black loams, sandy loams, bottom or upland, prairie or timbers.

No Other Corn Adapts Itself so Readily to Local Conditions.

F. O. B. No order accepted for less than one bushel.

Our Northern Type of Gold Standard Leaming.

To supply the great demand for this corn in the northern corn belt we are breeding a type well adapted to the circumstances and conditions found in Iowa, northern Illinois and southern Wisconsin. It resembles the original type of Gold Standard Learning exactly, except in two or three characteristics, namely: The kernel is much smoother and somewhat shorter and the circumference of the ears is not so great.

IN ALL OTHER RESPECTS THESE TYPES ARE IDENTICAL.

Prices Same as for the Rougher Type.



Early Northern Leaming.



The Rough Type of Gold Standard Leaming.

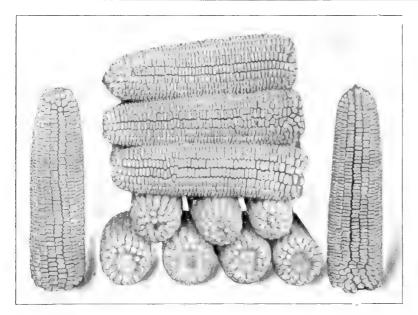


A Breeding Block of Gold Standard Leaming.

SILVER KING Bred from Silver Mine



Points We Are Breeding Into This Variety Lengthening Kernel, Improving Butt, Closing Up Space Between Rows, Increasing the Oil and INCREASING THE YIELD



Silver King Corn.

and heavy, averaging 8 to 11 feet in height, with a large amount of foliage. This corn grows anywhere and is especially well adapted to the northern part of the corn belt, maturing in about 105 days.

The ears are compact with a small cob for a white corn. They dry out readily and thus escape early frosts. Farmers in Northern Illinois, Iowa, Wisconsin, South Dakota, Southern Minnesota and Michigan will find this variety well suited to their conditions of soil and climate. The entire plant being of medium size, with heavy foliage, is a favorite with growers who cut and shock their crop or put it into the silo.

As a milling variety it has no superior. The meal is pure white, of fine texture and the proportion of bran small. Special attention has been given to increasing its oil content.

It Can be Planted Thick and is the Best Possible Corn for Growing on Thin Land.

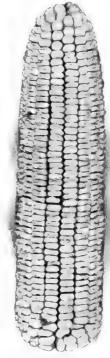
It is a gross feeder and able to collect its food from the soil under unfavorable conditions. However it responds readily to fertilizers and to favorable conditions of soil and climate.

Prices:	IN THE EAR (sent in bushel crates)	\$2.00
i iiccs.	This variety shelled, per bushel (bags free)	. \$1.50

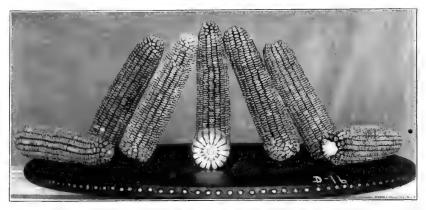


HIS is a pure white corn with white cob. The kernel is especially broad and deep, with well developed vigorous germ. forming a perfectly cylindri-

cal ear, with corn all the way round and up and down, shelling 90 per cent of grain. The kernels are three-fifths inch long and two-fifths inch wide, moderately thick, with square rough crowns, broad wedge shape. The ears are from 8 to 11 inches long, one and two to each stalk, 7 to 8 inches in circumference, cylindrical with very well filled butts and tips and small shank. The stalks are rather short



Silver King Seed Ear.



Golden Eagle Seed-Corn.

GOLDEN EAGLE

A deep pure yellow corn with characteristic red cob. The ears are uniform, 8 to 10 inches long, 7 to 8 inches in circumference, cylindrical with well filled butts and exceedingly well developed tips. The kernels are rough, deep, three-fifths to two-thirds inch long, two-fifths inch wide, broad wedge

and uniform. One of the chief characteristics of **Golden Eagle** is its large percentage of grain in which respect it exceeds any other variety. The average is about 90, often above. The very small, light cob, deep kernel and perfect cylindrical shape makes this high average possible. Each ear contains 16 to 18 rows of kernels and each row 50 to 60 kernels. Forty bushels of ear corn will shell 44 bushels of grain.

This is an early variety, maturing in about 105 days. It is an especially desirable yellow corn for northern latitudes of the corn belt. It grows well on almost any soil. It can be planted early for starting Christmas beeves around September 1. It is used extensively as a replant corn and is especially desirable for fields which for some reason have to be planted late. It stands high with feeders because of the small cob. It is easily broken and readily masticated by steers. As it matures thoroughly it is **sweet** and **palatable**, making the **very best** grain fed.

The stalk is rather light, short and well developed. The foliage is abundant. The well developed roots, strong and wiry stalks enables it to stand up well even during windy seasons. When mature the husks are loose, dropping away from the ear. Considering the size of the ear it is a surprisingly good yielder, due to the fact that a great many of the stalks bear two ears. Every stockman should have at least a small acreage of Golden Eagle corn for early feed as in this respect it has no peer.

Prices.	IN THE EAR (sent in bushel crates) Shelled, per bushel (bags free)	\$2.00
i iiccs.	Shelled, per bushel (bags free)	\$1 50
FOR	No order accented for less than one	buchel .

The IMPROVED MASTODON

OUR FAMOUS ENSILAGE CORN =

Is a yellow corn with white cap and red cob. The ears attain exceptional size, being from $9\frac{1}{2}$ to 12 inches long and from $7\frac{1}{2}$ to $8\frac{1}{2}$ inches in circumference. Some of the ears retain a slight taper from butt to tip, but the large majority are very cylindrical. The ears weigh 11 to 18 oz., having from 16 to 22 rows. The crown is slightly roughened with rounding corners, the rounding corners giving a smoother appearance to the corn than it really has. The kernels set very close together, and have a fine large development of the germ. This corn carries a large per cent of oil and protein. We have obtained some



A Half Bushel of Improved Mastodon.

striking results as to yield with the Improved Mastodon. In a test plat under ordinary condition this corn yielded over 100 bushels an acre. The stalk is large and stiff, producing a great amount of luxuriant foliage which, when cured, affords a very superior article of fodder. It stands about 10 feet high, the ear appearing 4 feet from the ground. It has come into such favor as an ensilage corn that there is a great demand for it by dairymen throughout the corn belt. It matures in 120 days and is recommended for any soil in the central and southern corn belt.

Prices.	IN THE EAR (sent in bushel crates)	\$	2.00
I lices.	Shelled, per bushel (bags free)		\$1.50
F. O.		No order accepted for less than one bushel	,

RILEY'S FAVORITE

It is one of the greatest yielders of the early corns, maturing in 100 days, escaping the early frosts in the north. This corn is of a deep yellow color, carried on a deep red cob. The

A Yellow Corn

ESPECIALLY DESIR-ABLE for the NORTH. IOWA. WISCONSIN. MICHIGAN and Parts of the DAKOTAS

kernels are long and rather broad. The ears run from 7 to 10 inches in length and 7 to $7\frac{1}{2}$ inches in circumference.

The stalks are medium in size with heavy foliage, carrying the ear about 4 feet from the ground.

The size of the ears with the large amount of carbohydrates in this corn make it especially desirable for the finishing period in the fattening of cattle.

This corn is very popular in the north on account of its early maturity yet it is largely grown in the middle corn belt. On old soils it is one of the most prolific yielders.

Our supply of this corn is limited. Order at once.

Prices: IN THE EAR (sent in bushel crates) \$2.50 \ No order accepted for less than one bushel. Shelled, per bushel, (bags free) \$1.50 \ F. O. B.



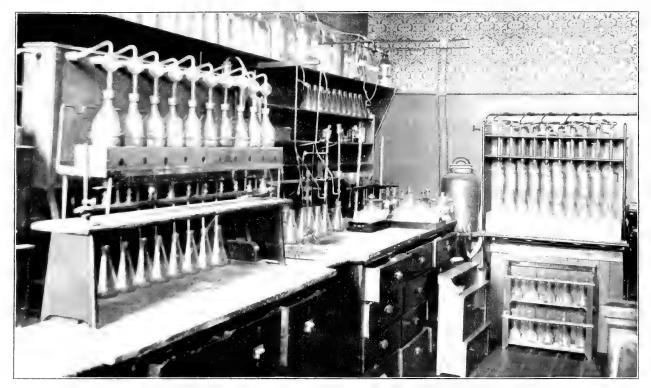
Improved Calico.

This is the only hybrid corn that we recommend. Its characteristics are of such quality that it ranks second to none in some of the most important uses of corn and is

the only cross to our knowledge meriting continuation. We are now breeding Improved Calico for increase in yield and those characteristics which mark a high-bred corn. This variety ranges in color from a dappled yellow to a light spotted red, with all the variation imaginable between. While in color it is so divergent, in shape and size of ear it is very uniform, being of a slightly tapering shape with well capped tips and good development at butt. The kernels are rough, moderately broad, thick and deep, of broad wedge shape, a large majority of the kernels are speckled, however there are some of solid color. The stalks are thick and of moderate height, 8 to 11 feet, carrying the ear 4 feet

The foliage is immense with long, broad leaves. The maturity is 115 days. Many from the ground. southern feeders cannot be persuaded to grow and feed any other corn. Although other varieties may be high in protein and oil, they refuse to be moved from their devotion to Improved Calico. The kernels are not flinty and are readily masticated, thus preparing them for thorough assimilation in the steer's stomach. It is probably this, along with the fact that the substance of the kernel is in a softer condition than in other varieties, making it less hard for the gastric juices of the animal's stomach to digest it, that cattle do so well on it.

Prices: Shelled, per bushel (bags free) \$1.50 No order accepted for less than one bushel. F. O. B.



A corner of Funk Bros. Chemical Laboratory.

OUR LABORATORY

Is thoroughly fitted with the most modern equipment for analyzing corn and other grains, some of the apparatus manufactured especially for us under the direction of our chemist, Prof. R. O. Graham.

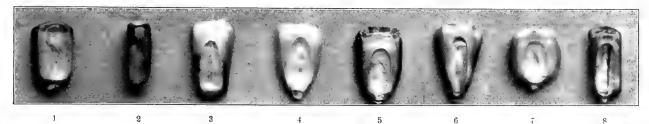
We are using this laboratory that we may produce a corn that will fatten an animal quicker and more economically than any other food or combination of foods now known.

Sixteen hours is the time required to make a test for protein in corn, while it takes 22 hours to make the test for oil.

Cooperation of the farm and laboratory is the best known method possible for the production of high oil and high protein corn.

Three Important Points-Important Items.

- 1. What is meant by CORN BREEDING? Simply this: THE INCREASING OF ITS YIELDING POWER AND IMPROVEMENT OF ITS FEEDING VALUE.
 - 2. The place to breed seed corn is THE CENTER OF THE CORN BELT—that place is McLEAN COUNTY, ILL.
- 3. Corn is the greatest money earner yet introduced to the American Farmer. Could there be anything of greater importance to him than the INCREASING OF ITS YIELD AND FEEDING VALUE?



Group of kernels showing the desirable and undesirable shapes. Nos. 63, 4, 5, 6 are fair to best shapes, while 1, 2, 7 and 8 are to be avoided.



GREAT DAKOTA OATS



Originated In the Far North

The Great Dakota Oats originated in the far north. Great Dakota Oats are white. Their foliage is abundant and affords a remarkable quantity and quality of straw. They are a very heavy variety, often weighing 40 pounds to the measured bushel. These oats are medium early in maturity. In our latitude they ripen at the most opportune time of the average season. If planted the first or second week in April they ripen about the 10th of July. At this time, generally speaking, comes the finest harvest weather of our year.

They are called "Great" for many reasons.

The "Great" white berries are well named for their size is such that in this respect they have no equal. "Great" in yield, for which they are justly noted. This, their yield, is the "greatest" of their many good qualities.

The strength of their stalk makes them Great resisters of wind storms. The single straw of this renowned variety of oats contain a "Great" many berries. It is the average number of berries to the stalk that counts. The Great Dakota has the average that makes it possible for them to outyield all others.

IT IS THESE CHARACTERISTICS THAT ENABLES THEM TO GIVE THE "CREATEST" AND BEST SATISFACTION TO THE GROWER.



SILVER MINE.

These peerless white oats are extremely popular throughout lowa and Illinois. They are of medium height with very heavy straw and an extraordinary large number of oats in a single head.

THIS THICK, STRONG STRAW STANDS STRAIGHT EVEN IN WET AND WINDY SEASONS.

Silver Mine Oats are the best variety known to sow as a nurse crop for clover or timothy. The oats are plump and of good length, making them very heavy in weight. The bright lustre of these oats render them very marketable, and they will often grade when others do not.

AS A YIELDER THEY HAVE NO SUPERIOR.

Oats are not a profitable crop unless they yield more than 60 bushels every time. One of the greatest risks a farmer takes is on his oats. Why don't you make yourself safe and secure by sowing Silver Mine Oats?

WITH PROPER HANDLING THEY ARE CERTAIN MONEY EARNERS.

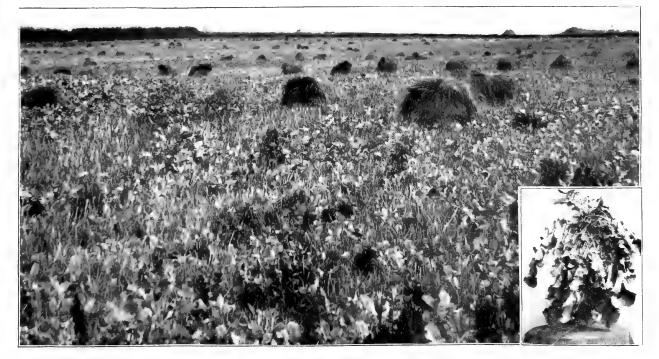
EARLY ILLINOIS.

This is the earliest variety of white oats we ever raised that proved sa tisfactory, and they more than satisfied our requirements for an early oats. Taking everything into consideration, for the man who has to sow oats, these are the especial variety for him. They attain better results at a better time for most purposes than all other oats. The height of Early Illinois is not very great but the straw is thick and carries a large number of broad leaves.

THE QUALITY MOST DESIRED IN OATS IS YIELD.

Although the size of these oats is not extraordinary the weight and heading are such that yield is the quality most marked in the Early Illinois.

Prices, Any Variety:



WARF ESSEX RAPE

IMPORTED BY US DIRECT FROM EUROPE. THE MOST FAMOUS AND POPULAR FORAGE CROP OF AMERICA.

 $\mathbf{\zeta}$ HIS extraordinary plant produces broad, succulent leaves on a central stalk. It is on these leaves, that the hog, sheep, or steer thrives and grows. There is no crop so easily and cheaply produced. The most profitable use of this forage plant is to sow it with oats. The oats act as a nurse crop, keeping the rape dwarfed so that at cutting time by setting the binder a trifle high it makes no trouble. After the oats are cut then it is that the rapid and abundant growth of the rape takes place. From the cutting of the oats until winter sets in, a palatable and nourishing food is supplied, and its abundance is remarkable. Sheep are made ready for market quickly, while hogs will fatten on it nearly as well as upon grain. The advantage of sowing it with oats rather than in corn is that it is available for pasturage much sooner. Nothing excels rape as an early forage for pigs. Unused lots and out of the way places on the farm can be made to pay at least rent by sowing in rape.

One acre of well grown Rape will furnish pasture for ten to twenty head of sheep for two months, and in that time it will fatten them in good form for the market. Dwarf Essex Rape thrives best on a good soil, rich in vegetable matter. Slough lands are excellent.

This plant may be grown successfully in the following ways, viz. 1. In the early spring to provide pasture for sheep and swine. 2. In June or July on well prepared land to provide pasture for sheep.
2. Along with grain, using 2 lbs. of seed per acre, to provide pasture for sheep after harvest. 4. Along with peas, oats, clover seed, to provide pasture for sheep, and to get a "catch" of clover. 5. Along with corn, drilled in broadcast, to provide pasture for sheep. 6. In corn, sowing the seed with the last cultivation given to corn. Along with rye, sown in August, in sheep pasture. When Rape is sown broadcast, 5 lbs of seed per acre will suffice. When sown in rows, say 30 inches apart, and cultivated, from 1 to 2 lbs. will be enough. It is now being grown in the Northern and Middle states, from the Atlantic to the Pacific. Atlantic to the Pacific.

The MOST CONVENIENTLY GROWN. The GREATEST AMOUNT OF FOOD. RAPE IS THE CHEAPEST AND BEST FORAGE CROP IN THE WORLD.

PRICES

1 lb. postpaid 30c

2 lbs. postpaid 50c

3 lbs. postpaid 75c

25 lbs.....\$1.75

100 or more 5 2 c lb. Bags Free F.O.B.

PURE TIMOTHY SEED

Grown In Fields Containing No Weeds, Just Timothy We don't try to make our Timothy pure by fanning and screening, but we produce it Free from Weeds In the Field. Extra care is taken in this line. Our Timothy Seed will grow PRICES FURNISHED ON APPLICATION

CLOVER, Pure and Plump

Red Clover Seed, tested for germination and purity

Continuous labor and care of our clover fields renders our position unique in the production of PURE clover seed.

Great pains in procuring and storing this seed enables us to insure its germination. PRICES FURNISHED ON APPLICA-



ALFALFA SEED.

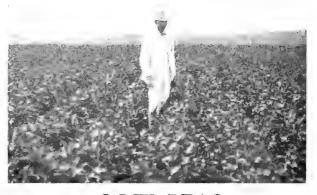
Western grown Alfalfa seed. A good germinator and pure. Notwithstanding the rumor that Alfalfa will not grow well in Illinois Funk Bros, have been growing it for a number of years and find it remarkably profitable. It is not an uncommon thing for fields to average five or six tons to the acre per year. Alfalfa is also one of the greatest restoratives of impoverished lands. It is a clover and works upon the condition of the soil much as common red clover with, however, twice the results. Prices on application.



SOY BEANS

Is one of the newly introduced crops that is possessed of real merit. It is adapted to rich prairie soils and on such soils reaches its fullest development. Combining both the fertilizing qualities of clover and yield of forage with a crop of seed that has a higher nutritive value than oats, it should have its place in the rotation system of every farm. Sown with rape in corn before the last cultivation it furnishes excellent pasturage for lambs, at the same time enriching the soil. When sown for hay or seed crop they may be drilled in with a corn planter requiring about three pecks of seed per acre.

PRICES: One peck \$1.00, one-half bushel \$1.75, per bushel \$3.00. F. O. B. Bags free.



COW PEAS.

No other crop is so well adapted to renovating old and clay soils. It will produce a crop in ground where clover will not catch. If cow peas are sown broadcast and disked in after the early oats are cut they will make a splendid pasture or furnish a fair crop of excellent hay besides restoring nitrogen to the soil.

PRICES: One peck \$1,00, one-half bushel \$1,75, one bushel \$3.00. F. O. B. Bags free.

CANADIAN FIELD PEAS.

A very valuable crop for sowing in the spring with oats, prolucing a large amount of green forage or an excellent crop of hay, at the same time enriching the ground.

PRICES: Peck 50c, one-half bushel \$1.00, one bushel \$1.75. F. O. B. Bags free.



LAWN GRASS SEED.

Beautiful lawns are secured from our lawn seed. It comes up quickly (in about two weeks) and withstands the hot, dry summers. This is on account of its deep rooting characteristics. Don't sod your yard. It is seldom satisfactory. It usually dies out and if it does grow it is nearly always full of weeds. We make a specialty of lawn grass seed.

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Order for

Farm Seeds Etc.

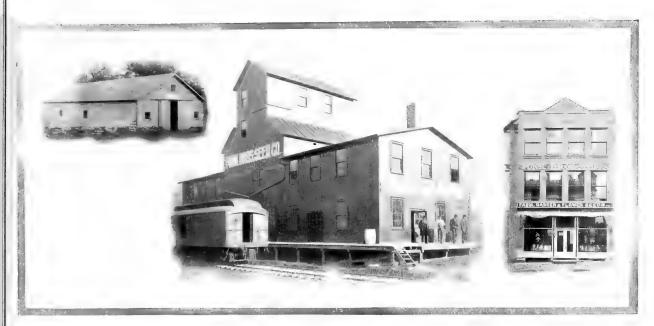
FUNK BROS. SEED

==BLOOMINGTON, ILLINOIS=

25,000 acres in one body, owned and operated by this company in McLean County. 7,000 acres devoted to the breeding of Corn.

		STATEIF	IF CORN IS WANTED IN THE EAR OR SHELLED	SHELLED
POSTAL MONEY ORDER, - \$		Bushels	ESA NAMES OF ARTICLES WANTED	<u> </u>
EXPRESS MONEY ORDER, - BANK DRAFT,			Boone Co. Special	<i>i</i>
CURRENCY,	TERMS:		His Excellency (Reid's Yellow Dent)	
POSTAGE STAMPS,	CASH WITH		Gold Standard Leaming	
TOTAL, &	ORDER		Silver King (Silver Mine)	
YOUR ORDER will be acknowledged when received.			Golden Eagle	_
SHIPMENT to follow immediately, unless otherwise ordered While we exercise the greatest care to have our seeds pure, and of the highest vitality, we do not give any warranty, express or implied. If the seeds are not fully satis-			Ríley's Favoríte	
factory, they may be returned to us at our expense and the money refunded.			Improved Calico	
Date Order is Written			Mastodon	
			Oats	
Name	•		Timothy	
Postoffice			Soy Beans (medíum early)	
County			Cow Peas (whippoorwill)	
State		Lbs.	Clover (crimson)	
P. O. Box Rural Delivery		-	Dwarf Essex Rape Imported	
			Alfalfa	•
To be Shipped where	Station			
To be Shipped when				





SEED HOUSE No. 1.

WAREHOUSE, FUNKS GROVE.

RETAIL STORE, BLOOMINGTON.

Remember

:44 4 6 4 1

A bushel of seed corn will plant seven acres of land.

A bushel of seed corn costs \$2.00 to \$2.50.

The cost per acre is only 30 to 35 cents.

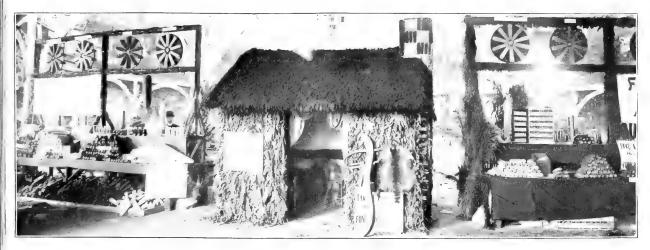
The cost is nominal and if it increases your yield only one bushel per acre you get back the price of your seed.

Remember, three of our varieties this year have yielded on our own farms more that 100 bushels per acre, by actual weight field run.

Boone County Special in a 150 acre field produced 1,135,420 pounds of corn, or 108 bushels per acre. His Excellency in a 220 acre field produced 1,555,940 pounds of corn, or 101 bushels per acre. Gold Standard Leaming in an 85 acre field produced 630,735 pounds of corn or 106 bushels per acre. At the Illinois State Fair exhibit of 1902, Funk Bros. took nine premiums out of fourteen entries on their

BOONE COUNTY SPECIAL. SILVER KING, (Silver Mine) and COLD STANDARD LEAMING.

HIS EXCELLENCY, (Reid's) GOLDEN EAGLE.



FUNK BROS. EXHIBIT AT THE ILLINOIS STATE FAIR 1902. Look for it next year, it will be located in the "DOME" building.



E. D. FUNK, PRESIDENT I. H. KERRICK, VICE-PRESIDENT F. H. PUNK, TREABURER J. D. PUNK, SECRETABY D. N. FUNK PRANK H. FUNK, GENERAL MANAGER

FUNK BROTHERS SEED COMPANY

BLOOMINGTON, ILLINOIS

PROF. R. O. GRAHAM CHEMIST

1000 317

In compliance with your request, we hand you herewith our 1903 catalogue.

We regret that owing to the extraordinary and unusually early denand for our seed corn, we are obliged to decline any further orders for corn with the exception of the following variety:
Riley's Favorite, in the ear only (of which we have only a limited aupply).

With an increased acreage and a larger production, we hope to have for our next season's trade a very large supply of every variety of which we make a specialty.

Thanking you for the interest manifested in our endeavor to supply a superior article of seed corn, and trusting we may be favored with your order next season, we are.

Yours oury truly,

FUNK BROTHERS SYFD COMPANY.



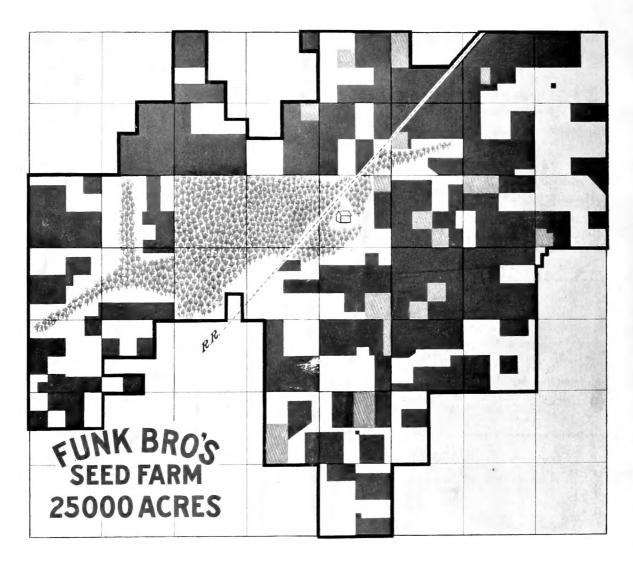
FUNK BROTHERS SEED COMPANY

403 North East Street

BLOOMINGTON, ILLINOIS



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Dark area, CORN. White area, PASTURE.

ORN. Gray area, Oats.

Pasture. Mottled area, Timber Land.

Wide black line, Boundary of Farm.

